

WHAT IS CLAIMED IS:

1. A photomask fabrication method, wherein mask correction units are established based on space dependency of a pattern obtained by a photolithographic process and etching process, and

design data for the photomask fabrication is corrected based on the mask correction units.

2. A photomask fabrication method according to claim 1, wherein along with correcting said design data, parameter settings for lithographic equipment are corrected according to the XY differential based on space dependency of said pattern.

3. A photomask fabricated by design data revised using mask correction units established based on space dependency of a pattern obtained by a photolithographic process and etching process.

4. A photomask according to claim 3, wherein along with correction of said design data by said mask correction units, said photomask is fabricated by mask lithographic equipment with parameter settings corrected according to the XY differential of said pattern based on the space dependency of said pattern.

5. An exposure method for exposing a wafer to light by utilizing a photomask according to claim 3.

6. An exposure method, wherein along with utilizing a photomask according to claim 3, said parameter settings are corrected according to the XY differential of said pattern based on space dependency of a pattern obtained by a photolithographic process and etching process, and a wafer is exposed to light.

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